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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,447	01/19/2005	Rex E. Blakeman	71486-0087	8660
20915	7590	08/16/2006	EXAMINER	
MCGARRY BAIR PC 171 MONROE AVENUE, N.W. SUITE 600 GRAND RAPIDS, MI 49503			STEPHENS, SCOTT H	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/522,447	BLAKEMAN ET AL.	
	Examiner	Art Unit	
	Scott H. Stephens	2872	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/19/05</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: Claim 1 does not provide proper support for the limitation “at least one of the mountings” in line 10. Examiner suggests amending the claim to read “at least one mounting”. Appropriate correction is required.

Claim 24 is objected to because of the following informalities: Claim 24 recites “a mounting frame” in lines 2 and 4 implying two mounting frames are being claimed. Examiner suggests amending the claim to read “the mounting frame” in line 4. Appropriate correction is required.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “base” in line 2 of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Mertens (US 6488382).

Regarding claim 1, Mertens discloses a vehicular mirror assembly comprising a mirror base (2) adapted to be mounted to a vehicle (col. 1 line 53); a mirror shell (4) mounted to the base and comprising a rearwardly-facing opening (figs. 1 and 2); a reflective element mounted within the mirror shell (fig. 1) in register with the rearwardly-facing opening; a tilt actuator mounted to at least one of the mirror shell and the base (col. 2 line 32), and to the reflective element for tiltably actuating the reflective element;

at least one mounting between a first component (2) and a second component (4), the first and second component mountings being between the base and the mirror shell; and comprises a snap-fit connection which securely retains the first component to the second component (col. 1 lines 56-58).

Regarding claim 2, Mertens discloses wherein the mounting further comprises an aperture (9) on the first component and a stud (8) on the second component, wherein the stud is adapted to be snap-fit within the aperture to securely mount the stud within the aperture (fig. 2).

Regarding claim 3, Mertens discloses wherein the stud comprises a first portion having a first diameter (19 and 20) and a second portion having a second diameter (15 and 17) smaller than the first diameter, the second portion adapted for snap fit communication with the aperture (fig. 2).

Regarding claim 4, Mertens discloses wherein the stud is integrally formed with the to the second component (fig. 4).

Claims 1-2, and 10, are rejected under 35 U.S.C. 102(e) as being anticipated by Ishigami (US 6712329).

Regarding claim 1, Ishigami discloses a vehicular mirror assembly comprising a mirror base (12) adapted to be mounted to a vehicle (fig. 13); a mirror shell (fig. 13) mounted to the base and comprising a rearwardly-facing opening (fig. 13); a reflective element mounted within the mirror shell (fig. 13) in register with the rearwardly-facing opening; a tilt actuator mounted to at least one of the mirror shell and the base (16), and to the reflective element for tiltably actuating the reflective element; at least one

mounting between a first component (12) and a second component (28), the first and second component mountings being between the base and the mirror shell; and comprises a snap-fit connection which securely retains the first component to the second component (col. 8 lines 40-60).

Regarding claim 2, Ishigami discloses wherein the mounting further comprises an aperture (24 and 26) on the first component and a stud (48) on the second component, wherein the stud is adapted to be snap-fit within the aperture to securely mount the stud within the aperture (fig. 1).

Regarding claim 10, Ishigami discloses the first component to be made of ABS plastic (col. 8 lines 50-51).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, 11-15, 19, 21-28, 32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishigami (US 6712329).

Regarding claims 3-4, 11-15, and 24-28, Ishigami teaches a vehicular mirror assembly comprising: a mirror housing (28) adapted to enclose a mounting frame (12) and a tilt actuator assembly (16) and having at least one of a first mounting stud (48) comprising a first portion having a first diameter (50 and 52) and a second portion

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having a second diameter (48) smaller than the first diameter, the second portion adapted for snap fit communication (fig. 1) integrally and rigidly attached to the mirror housing (col. 8 lines 49-50). Ishigami further teaches [the] mounting frame enclosed within the mirror housing (fig. 1) having at least one of a first mounting aperture (24 and 26) adapted for snap fit communication with the at least one of the first mounting aperture and the first portion adapted for supporting communication with the mounting frame (fig. 1). Although Ishigami additionally teaches a tilt actuator mounted to the mounting frame (fig. 1) Ishigami is silent on how the tilt actuator is specifically mounted and thus lacks specific mention of second mounting studs and apertures. However, snap fit mounting studs are well known within the art as evidenced by Ishigami and thus At the time of invention, it would have been obvious to one of ordinary skill in the art to use a integrally and rigidly attached snap fit mounting stud to mount Ishigami's tilt actuator to the mounting frame. The motivation for doing this would have been to provide lower costs or easier assembly work as suggested by Ishigami (col. 2 line 6).

Regarding claims 19, and 32, the references do not specifically show the aperture to include a wall inclined at approximately 10°. However, aperture walls which accommodate a mounting stud are commonly inclined or tapered. At the time of invention, it would have been obvious to one of ordinary skill in the art to make the aperture walls shown by Ishigami inclined as claimed in order to help guide the insertion of the stud into the aperture, thus providing easier assembly of the components being snap fit together as suggested by Ishigami (col. 2 line 5).

Regarding claim 21-23 and 34-36, Ishigami teaches parts of the mirror to be made of ABS plastic but lacks specific mention of the mounting bracket comprising glass-filled nylon, or polyester, or the housing to comprise acetal or injection molding. However, these materials are very well known. At the time of invention, it would have been obvious to one of ordinary skill in the art to form mirrors out of the following materials; glass-filled nylon, acetal, polyester, or injection molding. The motivation for doing this would have been to reduce manufacturing costs as suggested by Ishigami (col. 2 line 5).

Claims 9, 20, and 33, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishigami (US 6712329) in view of Mertens (US 6488382).

Ishigami lacks a bore extending coaxially through the stud. Mertens teaches a bore extending coaxially through the stud (fig. 4). At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the studs of Ishigami to include the bore hole as taught by Mertens. The motivation for doing this would have been allow a spring to be inserted in the hole to provide elastic tension in the connection as suggested by Mertens (col. 2 lines 53-54).

Claims 5-8, 16-18, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishigami (US 6712329) as applied to claims 4, 15, and 28 above, and further in view of Weaver (US 5604645).



Ishigami teaches the invention as claimed but lacks specific mention of the angles as claimed. Weaver teaches a vehicular mirror with the specific claimed angles. Regarding claims 5, 16, and 29, Weaver teaches wherein the second portion of the mounting stud comprises a neck portion (portion below taper 44) and a bulb end (40), the neck portion having a diameter smaller than the diameter of the bulb end (fig. 4). Regarding claims 6, 17, and 30, Weaver teaches wherein the bulb end comprises an annular face (42) having an approximately 45° bevel (col. 4 line 15). Regarding claims 7, 18, and 31, Weaver teaches wherein the neck portion comprises a truncated cone inclined approximately 10° (col. 4 line 19). At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Ishigami's mounting studs to include the specific angles taught by Weaver. The motivation for doing this would have been to provide an optimal snap fit connection as suggested by Weaver (see col. 2).

Regarding claim 8, the references do not specifically show the aperture to include a wall inclined at approximately 10°. However, aperture walls which accommodate a mounting stud are commonly inclined or tapered. At the time of invention, it would have been obvious to one of ordinary skill in the art to make the aperture walls shown by Ishigami inclined as claimed in order to help guide the insertion of the stud into the aperture, thus providing easier assembly of the components being snap fit together as suggested by Ishigami (col. 2 line 5).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kurz (US 3843236), Guttenberger (US 5293784), Dolan (US 6039449), Brechbill (US 6347872), Centmayer (US 20050052764), and Ishigami (US 7033033) each teach mirrors with snap fit connections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott H. Stephens whose telephone number is 571-272-3113. The examiner can normally be reached on Monday-Friday 7:30am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Scott Stephens *SHS*

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Friday, August 04, 2006

  
MARK A. ROBINSON  
PRIMARY EXAMINER